"Assuring Customer Satisfaction through Quality Products and Services."

www.msitech.net

THE PERIODIC TABLE OF CHEMICAL ELEMENTS

化学元素周期表

1																	2
1.01																	4.00
0.0007																	0.0002
-259.14																	-272.2
H																	**He**
氢																	氦
Hydrogen																	Helium
Qīng																	Hài
3	4											5	6	7	8	9	10
6.94	9.01											10.81	12.01	14.01	16.00	19.00	20.18
0.53	1.85											2.34	2.27	0.001	0.001	0.001	0.0009
180.54	1287											2075	3550	-210.00	-218.79	-219.62	-248.59
Li	**Be**											**B**	**C**	**N**	**O**	**F**	**Ne**
锂	铍											硼	碳	氮	氧	氟	氖
Lithium	Beryllium											Boron	Carbon	Nitrogen	Oxygen	Fluorine	Neon
Lǐ	Pí											Péng	Tàn	Dàn	Yǎng	Fú	Nǎi
	Ka 0.108											Ka 0.183	Ka 0.277	Ka 0.392	Ka 0.525	Ka 0.677	Ka 0.849
11	12											13	14	15	16	17	18
22.99	24.31											26.98	28.09	30.97	32.07	35.45	39.95
0.97	1.74											2.70	2.33	1.82	2.07	0.003	0.002
97.72	650											660.32	1414	44.15	115.21	-101.5	-189.35
Na	**Mg**											**Al**	**Si**	**P**	**S**	**Cl**	**Ar**
钠	镁											铝	硅	磷	硫	氯	氩
Sodium	Magnesium											Aluminium	Silicon	Phosphorus	Sulfur	Chlorine	Argon
Nà	Měi											Lǚ	Guī	Lín	Liú	Lǜ	Yà
	Ka 1.254											Ka 1.486	Ka 1.740	Ka 2.010	Ka 2.309	Ka 2.622	Ka 2.958
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
39.10	40.08	44.96	47.87	50.94	52.00	54.94	55.85	58.93	58.69	63.55	65.38	69.72	72.64	74.92	78.96	79.90	83.80
0.86	1.54	2.99	4.54	6.11	7.15	7.44	7.87	8.86	8.91	8.93	7.13	5.91	5.32	5.78	4.81	3.12	0.004
63.38	842	1541	1668	1910	1907	1246	1538	1495	1455	1084.62	419.53	29.76	938.25	615	221	-7.3	-157.36
K	**Ca**	**Sc**	**Ti**	**V**	**Cr**	**Mn**	**Fe**	**Co**	**Ni**	**Cu**	**Zn**	**Ga**	**Ge**	**As**	**Se**	**Br**	**Kr**
钾	钙	钪	钛	钒	铬	锰	铁	钴	镍	铜	锌	镓	锗	砷	硒	溴	氪
Potassium	Calcium	Scandium	Titanium	Vanadium	Chromium	Manganese	Iron	Cobalt	Nickel	Copper	Zinc	Gallium	Germanium	Arsenic	Selenium	Bromine	Krypton
Jiǎ	Gài	Kàng	Tài	Fán	Gè	Měng	Tiě	Gǔ	Niè	Tóng	Xīn	Jiā	Zhě	Shēn	Xī	Xiù	Kè
Ka 3.314	Ka 3.692	Ka 4.093	Ka 4.512	Ka 4.953	Ka 5.415	Ka 5.900	Ka 6.405	Ka 6.931	Ka 7.480	Ka 8.046	Ka 8.637	Ka 9.251	Ka 9.886	Ka 10.543	Ka 11.224	Ka 11.924	Ka 12.648
	La 0.341	La 0.395	La 0.452	La 0.510	La 0.572	La 0.637	La 0.705	La 0.775	La 0.849	La 0.928	La 1.012	La 1.098	La 1.188	La 1.282	La 1.379	La 1.481	La 1.585
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
85.47	87.62	88.91	91.22	92.91	95.94	(98)	101.07	102.91	106.42	107.87	112.41	114.82	118.71	121.76	127.60	126.90	131.29
1.53	2.64	4.47	6.51	8.57	10.22	11.50	12.37	12.41	12.02	10.50	8.69	7.31	7.29	6.69	6.23	4.93	0.006
39.31	1526	1526	1855	2477	2623	2157	2334	1964	1554.9	961.78	321.07	156.60	231.93	630.63	449.51	113.7	-111.7
Rb	**Sr**	**Y**	**Zr**	**Nb**	**Mo**	**Tc**	**Ru**	**Rh**	**Pd**	**Ag**	**Cd**	**In**	**Sn**	**Sb**	**Te**	**I**	**Xe**
铷	锶	钇	锆	铌	钼	锝	钌	铑	钯	银	镉	铟	锡	锑	碲	碘	氙
Rubidium	Strontium	Yttrium	Zirconium	Niobium	Molybdenum	Technetium	Ruthenium	Rhodium	Palladium	Silver	Cadmium	Indium	Tin	Antimony	Tellurium	Iodine	Xenon
Rú	Sī	Yǐ	Gào	Ní	Mù	Dé	Liǎo	Lǎo	Bā	Yín	Gé	Yīn	Xī	Tī	Dì	Diǎn	Xiān
Ka 13.396	Ka 14.165	Ka 14.958	Ka 15.775	Ka 16.615	Ka 17.480	Ka 18.367	Ka 19.279	Ka 20.216	Ka 21.177	Ka 22.163	Ka 23.173	Ka 24.210	Ka 25.271	Ka 26.359	Ka 27.473	Ka 28.612	Ka 29.775
La 1.692	La 1.806	La 1.924	La 2.044	La 2.169	La 2.292	La 2.423	La 2.558	La 2.697	La 2.838	La 2.983	La 3.133	La 3.286	La 3.444	La 3.604	La 3.768	La 3.938	La 4.110
55	56	57	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
132.91	137.33	138.91	178.49	180.95	183.84	186.21	190.23	192.22	195.08	196.97	200.59	204.37	207.20	208.98	(209)	(210)	(222)
1.87	3.59	6.15	13.31	16.65	19.25	21.02	22.61	22.65	21.46	19.28	13.53	11.85	11.34	9.81	9.32	7.00	0.01
28.44	727	920	2233	3017	3422	3186	3033	2446	1768.3	1064	-38.83	304	327.46	271.5	254	302	-71
Cs	**Ba**	**La**	**Hf**	**Ta**	**W**	**Re**	**Os**	**Ir**	**Pt**	**Au**	**Hg**	**Tl**	**Pb**	**Bi**	**Po**	**At**	**Rn**
铯	钡	镧	铪	钽	钨	铼	锇	铱	铂	金	汞	铊	铅	铋	钋	砹	氡
Cesium	Barium	Lanthanum	Hafnium	Tantalum	Tungsten	Rhenium	Osmium	Iridium	Platinum	Gold	Mercury	Thallium	Lead	Bismuth	Polonium	Astatine	Radon
Sè	Bèi	Lán	Hā	Tān	Wū	Lái	É	Yī	Bó	Jīn	Gòng	Tā	Qiān	Bi	Pō	Ài	Dòng
Ka 30.973	Ka 32.194	Ka 33.442	La 7.899	La 8.146	La 8.398	La 8.652	La 8.911	La 9.175	La 9.442	La 9.713	La 9.989	La 10.269	La 10.551	La 10.839	La 11.131	La 11.427	La 11.727
La 4.285	La 4.466	La 4.647	Ma 1.646	Ma 1.712	Ma 1.775	Ma 1.843	Ma 1.907	Ma 1.980	Ma 2.050	Ma 2.123	Ma 2.195	Ma 2.271	Ma 2.342	Ma 2.423	Ma 2.499	Ma 2.577	Ma 2.654
87	88	89															
(223)	(226)	(227)															
1.87	5.50	10.07															
700	700	1050															
Fr	**Ra**	**Ac**															
钫	镭	锕															
Francium	Radium	Actinium															
Fāng	Léi	Ā															
La 12.031	La 12.339	La 12.652															
Ma 2.732	Ma 2.806	Ma 2.900															

58	59	60	61	62	63	64	65	66	67	68	69	70	71
140.12	140.91	144.24	(145)	150.36	151.96	157.25	158.93	162.50	164.93	167.26	168.93	173.04	174.47
6.77	6.77	7.01	7.26	7.52	5.24	7.90	8.23	8.55	8.80	9.07	9.32	6.97	9.84
795	935	1024	1042	1072	826	1312	1356	1407	1461	1529	1545	824	1652
Ce	**Pr**	**Nd**	**Pm**	**Sm**	**Eu**	**Gd**	**Tb**	**Dy**	**Ho**	**Er**	**Tm**	**Yb**	**Lu**
铈	镨	钕	钷	钐	铕	钆	铽	镝	钬	铒	铥	镱	镥
Cerium	Praseodymium	Neodymium	Promethium	Samarium	Europium	Gadolinium	Terbium	Dysprosium	Holmium	Erbium	Thulium	Ytterbium	Lutetium
Shì	Pǔ	Nǚ	Pō	Shān	Yōu	Gá	Tè	Dī	Huǒ	Ěr	Diū	Yì	Lǔ
La 4.839	La 5.035	La 5.228	La 5.432	La 5.633	La 5.849	La 6.053	La 6.273	La 6.498	La 6.720	La 6.949	La 7.180	La 7.416	La 7.655
Ma 0.884	Ma 0.927	Ma 0.979	Ma 1.023	Ma 1.078	Ma 1.131	Ma 1.181	Ma 1.240	Ma 1.293	Ma 1.348	Ma 1.404	Ma 1.462	Ma 1.526	Ma 1.580
90	91	92	93	94	95	96	97	98	99	100	101	102	103
232.04	231.04	238.03	(237)	(244)	(243)	(247)	(247)	(251)	(252)	(257)	(258)	(259)	(262)
11.72	15.37	18.95	20.45	19.84	13.69	13.51	14.79	13.5					
1842	1568	1132	644	639.4	1176	1340	1050	900	860	1527	827	827	1627
Th	**Pa**	**U**	**Np**	**Pu**	**Am**	**Cm**	**Bk**	**Cf**	**Es**	**Fm**	**Md**	**No**	**Lr**
钍	镤	铀	镎	钚	镅	锔	锫	锎	锿	镄	钔	锘	铹
Thorium	Protactinium	Uranium	Neptunium	Plutonium	Americium	Curium	Berkelium	Californium	Einsteinium	Fermium	Mendelevium	Nobelium	Lawrencium
Tǔ	Pú	Yóu	Ná	Bù	Méi	Jū	Péi	Kāi	Āi	Fèi	Mén	Nuò	Láo
La 12.968	La 13.291	La 13.614	La 13.946	La 14.282	La 14.620								
Ma 2.996	Ma 3.082	Ma 3.171	Ma 3.250	Ma 3.339	Ma 3.438								

金属 Metals
- 碱金属 Alkali Metals
- 碱土金属 Alkaline Earth Metals
- 镧系金属 Lanthanoids
- 锕系金属 Actinoids
- 过渡金属 Transition Metals
- 其他金属 Other Metals

主族金属 Metalloids

非金属 Non-Metals
- 其他非金属 Other Non Metals
- 卤素 Halogens
- 惰性气体 Noble Gases

Atomic Number / Atomic Weight
Melting Point(°C) / Density(g/cm³)
Symbol
Element Name
Energy(keV)
Spectral Line

Elemental Analyzer : Ideal Solutions for Elemental Analysis

Handheld XRF Spectrometer
- S1 TITAN

Arc Spark Optical Emission Spectrometer (OES) - Metal Analysis
- Q2 ION
- ELEMENTAL SUITE
- Q4 TASMAN
- Q8 MAGELLAN

Combustion & Inert Gas Fusion Analyzer - CS / ONH Analysis
- G4 ICARUS SERIES 2
- G4 PHOENIX
- G6 LEONARDO
- G8 GALILEO

Benchtop EDXRF Spectrometer
- RIGAKU NEX CG
- RIGAKU NEX QC

Microscope : Ideal Scientific Instruments for your Imaging Solutions

Material Optical Microscope
- Compound Microscope
- Microscope Cameras
- Stereo Microscope
- Inverted Microscope

3D Digital Microscope
- HRX-01

Table Top SEM with EDS
- SNE-4500

Singapore Corporate Head Quarter
MSITECH (Asia-Pacific) Pte. Ltd.
No. 33 Ubi Avenue 3, #06-41 Vertex (Tower A), Singapore 408868.
Email : info@msitech.net Tel : +65 6509 6938 Fax : +65 6509 6939

MSITECH GROUP OF COMPANIES

MSI Technologies (Malaysia) Sdn. Bhd. Tel: +603 8993 9711/ 9722 Fax: +603 8993 9755
MSITECH (Singapore) Pte. Ltd. Tel: +65 6509 6938 Fax: +65 6509 6939

MSI Technologies (Penang) Sdn. Bhd. Tel: +603 8993 9711/ 9722 Fax: +603 8993 9755
MSI Technologies (Thailand) Co., Ltd. Tel: +66 2750 2838 Fax: +66 2750 2883